

IDS - 07/03/2006

JUL 03 2006

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

PTO/SB/08A (07-05)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449, TRADEMARKS

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1

of 16

## Complete if Known

Application Number	10/763,545
Filing Date	January 23, 2004
First Named Inventor	William C. Olson
Art Unit	1648
Examiner Name	Peng, Bo
Attorney Docket Number	57906-BA

U. S. PATENT DOCUMENTS				
Examiner Initials*	Cite No.*	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Number-Kind Code <sup>2</sup> (if known)		
BP		US- 6,025,154	10-05-2004	Y. Li et al.
		US- 6,265,184	07-24-2001	P.W. Gray et al.
		US- 6,268,477	06-30-2002	P.W. Gray et al.
		US- 6,448,375	09-10-2002	M. Samson et al.
		US- 6,743,594	06-01-2004	Y. Li et al.
		US- 6,797,811	09-28-2004	P.W. Gray et al.
		US- 6,972,126	12-06-2005	G.P. Allaway et al.
		US- 6,261,763	07-17-2001	G.P. Allaway et al.
		US- 2002-0150888	10-17-2002	P.W. Gray et al.
		US- 2004-0161739	08-19-2004	M. Samson et al.
		US- 2004-0230037	11-18-2004	P.W. Gray et al.
		US- 2004-0110127	06-10-2004	M. Samson et al.
		US- 2005-0154193	07-14-2005	V. Roschke et al.
		US- 2003-0100058	05-29-2003	V. Roschke et al.
		US- 2003-0166024	09-04-2003	C. Rosen et al.
		US- 2004-0151719	08-08-2004	Y. Li et al.
		US- 2001-0000241	04-12-2001	Y. Li et al.
		US- 2001-0046512	11-29-2001	V. Litwin et al.
		US- 2006-0029932	02-09-2006	G.P. Allaway et al.

FOREIGN PATENT DOCUMENTS				
Examiner Initials*	Cite No.*	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)		
BP		WO 95/16789	06-22-1995	
		WO 02/064612 A2	08-22-2002	
		WO 01/58915 A2	08-16-2001	
		WO 01/58916 A2	08-16-2001	
		WO 96/39437 A2	12-12-1996	
		WO 97/22698	06-26-1997	

Examiner Signature	/Bo Peng/	Date Considered	07/19/2006
--------------------	-----------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \*Applicant's unique citation designation number (optional). \*See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 801.04. <sup>1</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>2</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>3</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>4</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.88. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Applicants: William C. Olson and Paul J. Madden  
Serial No.: 10/763,545  
Filed: January 23, 2004  
Exhibit A

BEST AVAILABLE COPY

Approved for use through 07/31/2006. OMB 0551-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE  
is a collection of information unless it contains a valid OMB control number.

**Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.**

Substituting for form 1449/PTO

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

*(Use as many sheets as necessary)*

Sheet 2 of 6

<i>Complete if Known</i>	
Application Number	10/763,545
Filing Date	January 23, 2004
First Named Inventor	William C. Olson
Art Unit	1648
Examiner Name	Peng, Bo
Attorney Docket Number	57906-BA

**U. S. PATENT DOCUMENTS**

**FOREIGN PATENT DOCUMENTS**

Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	FOREIGN PATENT DOCUMENTS			
		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>2</sup>
		Country Code <sup>3</sup> "Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)			
BP	WO 97/44055	11-27-1997			
	WO 97/032019	09-04-1997			
	EP 96870021.1	03-01-1996			
	EP 96870102.9	08-06-1996			
↓	EP 1145721 A2	10-17-2001			
	EP 1146055 A2	10-17-2002			

**'EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 608. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. **'Applicant's unique citation designation number (optional):** See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 801.04. **'Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3):** For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. **'Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible:** **'Applicant is to place a check mark here if English language translation is present:**

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

BEST AVAILABLE COPY

**U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE**

Substitute for Form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

*(Use as many sheets as necessary)*

Sheet 3 of 6

<i>Complete if Known</i>	
Application Number	10/763,545
Filing Date	January 23, 2004
First Named Inventor	William C. Olson
Art Unit	1648
Examiner Name	Peng, Bo
Attorney Docket Number	57906-BA

**U. S. PATENT DOCUMENTS**

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	FOREIGN PATENT DOCUMENTS			
		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
	Country Code <sup>3</sup> *Number *Kind Code <sup>5</sup> (if known)				
BP	EP 1146122 A2	10-17-2001			
	EP 1148126 A2	10-24-2001			
	EP 1148127 A2	10-24-2001			
	EP 1149582 A2	10-31-2001			
↓	EP 1199360 A2	04-24-2002			
	EP 1482042 A1	12-01-2004			

Examiner Signature	/Bo Peng/	Date Considered	07/19/2006
-----------------------	-----------	--------------------	------------

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 808. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>3</sup>Applicant's unique citation designation number (optional). <sup>7</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.18 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 USC 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

6

of

6

Complete if Known

Application Number	10/763,545
Filing Date	January 23, 2004
First Named Inventor	William C. Olson
Art Unit	1648
Examiner Name	Peng, Bo
Attorney Docket Number	57906-BA

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
BP		Steinberger, P. et al., (2000) "Generation And Characterization Of A Recombinant Human CCR5-Specific Antibody", J. Biol. Chem. 275(46):36073-36078	
BP		Wu, L. et al., (1996) "CD4-Induced Interaction Of Primary HIV-1 Gp120 Glycoproteins With The Chemokine Receptor CCR-5", Nature 384:179-183	

Examiner Signature	/Bo Peng/	Date Considered	07/19/2006
--------------------	-----------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.  
This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

5

of

6

		Complete if Known	
		Application Number	10/763,545
		Filing Date	January 23, 2004
		First Named Inventor	William C. Olson
		Art Unit	1648
		Examiner Name	Peng, Bo
		Attorney Docket Number	57906-BA

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
BP		Dean, M. et al., (1996) "Genetic Restriction Of HIV-1 Infection And Progression To AIDS By A Deletion Allele Of The CKR5 Structural Gene", Science 273:1856-1862	
		He, J. et al., (1997) "CCR3 And CCR5 Are Co-Receptors For HIV-1 Infection Of Microglia", Nature 385:645-649	
		Konigs, C. et al., (2000) "Monoclonal Antibody Screening Of Phage-Displayed Random Peptide Library Reveals Mimotopes Of Chemokine Receptor CCR5: Implications For The	
		Tertiary Structure Of The Receptor And For An N-Terminal Binding Site For HIV-1 Gp120", Eur. J. Immunol. 30(4):1162-1171	
		Lee, B. et al., (1999) "Epitope Mapping Of CCR5 Reveals Multiple Conformational States And Distinct But Overlapping	
		Structures Involved In Chemokine Coreceptor Function", J. Biol. Chem. 274 (14):9617-9626	
		Mackay, C.R., (1996) "Chemokine Receptors And T Cell Chemotaxis", J. Exp. Med 184:799-802	
		Raport, C.J. et al., (1996) "Molecular Cloning And Functional Characterization Of A Novel Human CC Chemokine Receptor (CCR5)	
		For RANTES, MIP-1beta, And MIP-1alpha", J. Biol. Chem. 271(29):1761-17166	
↓		Samson, M. et al., (1996) "Molecular Cloning And Functional Expression Of A New Human CC-Chemokine Receptor Gene", Biochem. 35:3362-3367	

Examiner Signature	/Bo Peng/	Date Considered	07/19/2006
--------------------	-----------	-----------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.  
This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

<p style="text-align: center;"><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b></p> <p><i>(Use as many sheets as necessary)</i></p>				<i>Complete if Known</i>	
				<b>Application Number</b>	10/763,545
				<b>Filing Date</b>	January 23, 2004
				<b>First Named Inventor</b>	William C. Olson
				<b>Art Unit</b>	1648
				<b>Examiner Name</b>	Peng, Bo
<b>Sheet</b>	6	<b>of</b>	6	<b>Attorney Docket Number</b>	57906-BA

## **NON-PATENT LITERATURE DOCUMENTS**

Examiner Signature	/Bo Peng/	Date Considered	07/19/2006
-----------------------	-----------	--------------------	------------

*\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 608. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.*

**1** Applicant's unique citation designation number (optional). **2** Applicant is to place a check mark here if English language Translation is attached.  
This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:**  
**Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Form PTO-1449		U.S. Department of Commerce Patent and Trademark Office						Atty. Docket No. S7906-E JPW/AJD/BWSL	Serial No. 10/763,545				
								Applicant(s) W. C. Olson and P. J. Maddon					
								Filing Date January 23, 2004	Art Unit				
<b>U.S. PATENT DOCUMENTS</b>													
Examiner Initials	Exh No.	Document Number				Date	Name	Class	Subclass	Filing Date If Appropriate			
BP		6	5	2	8	6	2	5		03/04/03	Wu et al.		
		2003/0023044						01/30/03	Li et al.				
		2002/0048786						04/25/02	Rosen et al.				
↓		2002/0061834						05/23/02	Rosen et al.				
		2002/0076745						06/20/02	Li et al.				
<b>FOREIGN PATENT DOCUMENTS</b>													
		Document Number						Date	Country	Class	Subclass	Translation	
BP		9	8	1	8	8	2	6	05/07/98	PCT			
		9	6	4	1	0	2	0	12/19/96	PCT			
		9	7	2	6	0	0	9	07/24/97	PCT			
↓		9	7	3	7	0	0	5	10/27/97	PCT			
		9	7	4	7	3	1	9	01/07/98	PCT			
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>													
BP		Allaway, G.P., K.L. Davis-Bruno, B.A. Beaudry, E.B. Garcia, E.L. Wong, A.M. Ryder, K.W. Hasel, M.C. Gauduin, R.A. Koup, J.S. McDougal and P.J. Maddon. 1995. Expression and characterization of CD4-IgG2, a novel heterotetramer that neutralizes primary HIV type 1 isolates. AIDS Res Hum Retroviruses 11: 533-539;											
		Allaway, G.P., A.M. Ryder, G.A. Beaudry and P.J. Maddon. 1993. Synergistic inhibition of HIV-1 envelope-mediated cell fusion by CD4-based molecules in combination with antibodies to gp120 or gp41. AIDS Res. Hum. Retroviruses 9: 581-587;											
		Amara, A., S.L. Gall, O. Schwartz, J. Salamero, M. Montes, P. Loetscher, M. Baggolini, J.L. Virelizier and F. Arenzana-Seisdedos. 1997. HIV coreceptor downregulation as antiviral principle: SDF-1 $\alpha$ -dependent internalization of the chemokine receptor CXCR4 contributes to inhibition of HIV replication. J. Exp. Med. 186: 139-146;											
		Berger, E.A. 1997. HIV entry and tropism: the chemokine receptor connection. AIDS 11 (Suppl A): S3-S16;											
		Binczak, P.D., R.A. Fridell, I. Aramori, S.S.G. Ferguson, M.C. Caron and B.R. Cullen. 1997. HIV-1-induced cell fusion is mediated by multiple regions within both the viral envelope and the CCR5 co-receptor. EMBO J. 16: 2599-2609;											
↓		Brelot, A., N. Heveker, O. Pleskoff, N. Sol and M. Alizon. 1997. Role of the first and third extracellular domains of CXCR4 in human immunodeficiency virus coreceptor activity. J. Virol. 71: 4744-4751;											
EXAMINER <i>/Bo Peng/</i>				DATE CONSIDERED 07/20/2006									
<p>*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>													

Form PTO-1449		U.S. Department of Commerce Patent and Trademark Office				Atty. Docket No. 57906-E JPW/AJD/BWSL	Serial No. 10/763,545	
		INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)				Applicant(s) W. C. Olson and P. J. Maddon		
						Filing Date January 23, 2004	Art Unit	
<b>U.S. PATENT DOCUMENTS</b>								
Examiner Initials	Exh No.	Document Number		Date	Name	Class	Subclass	Filing Date If Appropriate
BP		2002/0099176		07/25/02	Li et al.			
		2002/0106742		08/08/02	Samson et al.			
		2002/0110805		08/15/02	Samson et al.			
		2002/0110870		08/15/02	Samson et al.			
		2002/0132269		09/19/02	Li et al.			
<b>FOREIGN PATENT DOCUMENTS</b>								
		Document Number		Date	Country	Class	Subclass	Translation Yes      No
BP		9	8	5	PCT			
		0	0	3	PCT			
		0	1	6	PCT			
		0	2	2	PCT			
		0	2	0	PCT			
		0	6	8	PCT			
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>								
BP		Chan, D.C. and P.S. Kim. 1998. HIV entry and its inhibition. Cell 93: 681-684;						
		Corinor, R.I., K.E. Sheridan, D. Ceradini, S. Choe and N.R. Landau. 1997. Change in co-receptor use correlates with disease progression in HIV-1 infected individuals. J. Exp. Med. 185: 621-628;						
		Crump, M.P., J.H. Gong, P. Loetscher, K. Rajarathnam, A. Amara, F. Arenzana-Seisdedos, J.L. Virelizier, M. Baggolini, B.D. Sykes and I. Clark-Lewis. 1997. Solution structure and basis for functional activity of stromal-cell derived factor-1; disassociation of CXCR4 activation from binding and inhibition of HIV-1. EMBO J. 16: 6996-7007;						
		Dagleish, A.G., P.C.L. Beverly, P.R. Clapham, D.H. Crawford, M.F. Greaves and R.A. Weiss. 1984. The CD4 (T4) antigen is an essential component of the receptor for the AIDS retrovirus. Nature 312: 763-766;						
		Donzella, G.A., D. Schols, S.W. Lin, J.A. Este, K.A. Nagashima, P.J. Maddon, G.P. Allaway, T.P. Sakmar, G. Henson, E.D. Clercq and J.P. Moore. 1998. AMD3100, a small molecule inhibitor of HIV-1 entry via the CXCR4 co-receptor. Nat. Med. 4: 72-77;						
		Doranz, B.J., K. Grovit-Ferbas, M.P. Sharron, S.H. Mao, M.B. Goetz, E.S. Daar, R.W. Doms and W.A. O'Brien. 1997. A small molecule inhibitor directed against the chemokine receptor CXCR4 prevents its use as an HIV-1 co-receptor. J. Exp. Med. 186: 1395-1400;						
<b>EXAMINER</b> /Bo Peng/		<b>DATE CONSIDERED</b>						07/20/2006
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.								

Form PTO-1449		U.S. Department of Commerce Patent and Trademark Office						Atty. Docket No. 57906-E JPW/AJD/BWSL	Serial No. 10/763,545		
INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)								Applicant(s) W. C. Olson and P. J. Maddon			
								Filing Date January 23, 2004	Art Unit		
U.S. PATENT DOCUMENTS											
Examiner Initials	Exh No.	Document Number					Date	Name	Class	Subclass	Filing Date If Appropriate
BP		0 9	5	9	4	9	8	3			06/15/00
		2002/0146415						10/10/02	Olson et al.		_____
		10	0	8	1	1	2	8			02/22/02
		2003/0044411						03/06/03	Olson et al.		_____
		2003/0228306						12/11/03	Olson et al.		_____
FOREIGN PATENT DOCUMENTS											
		Document Number					Date	Country	Class	Subclass	Translation
BP		0 2	0	8	3	1	7	2	PCT		Yes
		0 3	0	7	2	7	6	6	PCT		No
	3	9	7	4	9	4	2	4	PCT		
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)											
BP		Doranz, B.J., Z.-H. Lu, J. Rucker, T.-Y. Zhang, M. Sharron, Y.-H. Cen, Z.-X. Wang, H.-H. Guo, J.-G. Du, M.A. Accavitti, R.W. Doms and S.C. Peiper. 1997. Two distinct CCR5 domains can mediate co-receptor usage by human immunodeficiency virus type 1. <i>J. Virol.</i> 71: 6305-6314;									
		Dragic, T., V. Litwin, G.P. Allaway, S.R. Martin, Y. Huanh, K.A. Nagashima, C. Cayanan, P.J. Maddon, R.A. Koup, J.P. Moore and W.A. Paxton. 1996. HIV-1 entry into CD4+ cells is mediated by the chemokine receptor CC-CKR-5. <i>Nature</i> 381: 667-673;									
		Hill, C.M., D. Kwon, M. Jones, C.B. Davis, S. Marmon, B.L. Daugherty, J.A. DeMartino, M.S. Springer, D. Unutmaz and D.R. Littman. 1998. The amino terminus of human CCR5 is required for its function as a receptor for diverse human and simian immunodeficiency virus envelope glycoproteins. <i>Virology</i> 248: 357-371;									
		Kwong, P.D., R. Wyatt, J. Robinson, R.W. Sweet, J. Sodroski and W.A. Hendrickson. 1998. Structure of an HIV gp120 envelope glycoprotein in complex with the CD4 receptor and a neutralizing human antibody. <i>Nature</i> 393: 648-659;									
	↓	Laal, S., S. Burda, M.K. Gorny, S. Karwowska, A. Buchbinder and S. Zolla-Pazner. 1994. Synergistic neutralization of human immunodeficiency virus type 1 by combinations of human monoclonal antibodies. <i>J. Virol.</i> 68: 4001-4008;									
EXAMINER /Bo Peng/					DATE CONSIDERED 07/20/2006						
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.											

Form PTO-1449		U.S. Department of Commerce Patent and Trademark Office							Atty. Docket No. 57906-E JPW/AJD/BWSL	Serial No. 10/763,545		
		INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)							Applicant(s) W. C. Olson and P. J. Maddon			
									Filing Date January 23, 2004	Art Unit		
<b>U.S. PATENT DOCUMENTS</b>												
Examiner Initials	Exh. No.	Document Number						Date	Name	Class	Subclass	Filing Date If Appropriate
BP		60	2	8	2	3	8	0		Olson et al.	_____	04/06/01
		60	3	5	8	8	8	6		Olson et al.	_____	02/22/02
		6	1	0	7	0	1	9	08/22/00	Allaway et al.	_____	_____
		6	3	4	4	5	4	5	02/05/02	Allaway et al.	_____	_____
		6	5	4	8	6	3	6	04/15/03	Dragic et al.	_____	_____
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>												
BP		Li, A., H. Katinger, M.R. Posner, L. Cavacini, S. Zolla-Pazner, M.K. Gorny, J. Sodroski, T.C. Chou, T.W. Baba and R.M. Ruprecht. 1998. Synergistic neutralization of simian-human immunodeficiency virus SHIV-vpu+ by triple and quadruple combinations of human monoclonal antibodies and high-titer antihuman immunodeficiency virus type 1 immunoglobulins. <i>J. Virol.</i> 72: 3235-3240;										
		Mack, M., B. Luckow, P.J. Nelson, J. Cihak, G. Simmons, P.R. Clapham, N. Signoret, M. Marsh, M. Stangassinger, F. Borlat, T.N.C. Wells, D. Schlendorff and A.E.I. Proudfoot. 1998. Aminooxypentane-RANTES induces CCR5 internalization but inhibits recycling: a novel inhibitory mechanism of HIV infectivity. <i>J. Exp. Med.</i> 187: 1215-1224;										
		McKnight, A., D. Wilkinson, G. Simmons, S. Talbot, L. Picard, M. Ahuja, M. Marsh, J.A. Hoxie and P.R. Clapham. 1997. Inhibition of human immunodeficiency virus fusion by a monoclonal antibody to a coreceptor (CXCR3) is both cell type and virus strain dependent. <i>J. Virol.</i> 71: 1692-1696;										
		Strizki, J.M., J. Davis-Turner, R.G. Collman, J. Hoxie and F. Gonzalez-Scarano. 1997. A monoclonal antibody (12G5) directed against CXCR4 inhibits infection with the dual-tropic human immunodeficiency virus type 1 isolate HIV-1 89.6 but not the T-tropic isolate HIV-1 HxB. <i>J. Virol.</i> 71: 5678-5683;										
		Trkola, A., T. Dragic, J. Arthos, J. Binley, W.C. Olson, G.P. Allaway, C. Cheng-Mayer, J. Robinson, P.J. Maddon and J.P. Moore. 1996. CD4-dependent, antibody sensitive interactions between HIV-1 and its co-receptor CCR-5. <i>Nature</i> 384: 184-187;										
		Vijh-Warrier, S., A. Pinter, W.J. Honnen and S.A. Tilley. 1996. Synergistic neutralization of human immunodeficiency virus type 1 by a chimpanzee monoclonal antibody against the V2 domain of gp120 in combination with monoclonal antibodies against the V3 loop and the CD4-binding site. <i>J. Virol.</i> 70: 4466-4473;										
		Wu, L., G. LaRosa, N. Kassam, C.J. Gordon, H. Heath, N. Ruffing, H. Chen, J. Humblia, M. Samson, M. Parmentier, J.P. Moore and C.R. Mackay. 1997. Interaction of chemokine receptor CCR5 with its ligands: multiple domains for HIV-1 gp120 binding and a single domain for chemokine binding. <i>J. Exp. Med.</i> 186: 1373-1381;										
EXAMINER <i>/Bo Peng/</i>					DATE CONSIDERED 07/20/2006							
<p>*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>												

Form PTO-1449	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No. 57906-E JPW/AJD/BWSL	Serial No. 10/763,545
<b>INFORMATION DISCLOSURE CITATION</b> (Use several sheets if necessary)		Applicant(s) W. C. Olson and P. J. Maddon	
		Filing Date January 23, 2004	Art Unit

**U.S. PATENT DOCUMENTS**

Examiner Initials	Exh No.	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
BP		Pending claims in 09/888,938		Allaway et al.			06/25/01
		Allowed claims in 10/323,314		Dragic et al.			12/19/02
		0 8   6 2 7 6 8 4		Allaway et al.			04/02/96
		6 0   0 1 4 5 3 2		Allaway et al.			04/02/96
		0 8   6 6 3 6 1 6		Allaway et al.			06/14/96

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

BP	Ylisastigui, L., J.J. Vizzavona, E. Drakopoulou, P. Paindavoine, C.F. Calvo, M. Parmentier, J.C. Gluckman, C. Vita and A. Benjouad. 1998. Synthetic full length and truncated RANTES inhibit HIV-1 infection of primary macrophages. AIDS 12: 977-984;
	Tilley, S. A., W.J. Honnen, S. Warrier, M.E. Racho, T.C. Chou, M. Girard, E. Muchmore, M. Hilgartner, D.D. Ho, M.S.C. Fung and A. Pinter. 1991. Potent neutralization of HIV-1 by human and chimpanzee monoclonal antibodies directed against three distinct epitope clusters of gp120. Sixieme Colloque Des Cent Gardes, pp. 211-216;
	Tilley, S.A., W.J. Honnen, M.E. Racho, T.C. Chou and A. Pinter. 1992. Synergistic neutralization of HIV-1 by human monoclonal antibodies against the V3 loop and the CD4-binding site of gp120. AIDS Res. Hum. Retroviruses 80: 461-467;
	Choe, H., M. Farzan, Y. Sun, N. Sullivan, B. Rollins, P.D. Ponath, L. Wu, C.R. Mackay, G. LaRosa, W. Newman, N. Gerard, C. Gerard and J. Sodroski. 1996. The beta-chemokine receptors CCR3 and CCR5 facilitate infection by primary HIV-1 isolates. Cell 85: 1135-1148;
	Doranz, B.J., J. Rucker, Y. Yi, R. Smyth, M. Samson, S.C. Peiper, M. Parmentier, R.G. Collman and R.W. Doms. 1996. A dual-tropic primary HIV-1 Isolate that uses fusin and beta-chemokine receptors CKR-5, CKR-3, and CKR-2b as fusion cofactors. Cell 85: 1149-1158;
	Deng, H., R. Liu, W. Ellmeier, S. Choe, D. Unutmaz, M. Burkhardt, P.D. Marzio, S. Marmon, R.E. Sutton, C.M. Hill, C.B. Davis, S.C. Peiper, T.J. Schall, D.R. Littman and N.R. Landau. 1996. Identification of a major co-receptor for primary isolates of HIV-1. Nature 381: 661-666;
	Feng, Y., C.C. Broder, P.E. Kennedy and E.A. Berger. 1996. HIV-1 entry cofactor: functional cDNA cloning of a seven-transmembrane, G protein-coupled receptor. Science 272: 872-877;
▼	Fradd, F. and M.E. Mary. 1989. AIDS Vaccines: An Investor's Guide by Shearman Lehaman Hutton. Page 10 (Fig. 2);

EXAMINER	/Bo Peng/	DATE CONSIDERED	07/20/2006
----------	-----------	-----------------	------------

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449		U.S. Department of Commerce Patent and Trademark Office							Atty. Docket No. 57906-E JPW/AJD/BWSL	Serial No. 10/763,545	
		INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)							Applicant(s) W. C. Olson and P. J. Madden		
									Filing Date January 23, 2004	Art Unit	
<b>U.S. PATENT DOCUMENTS</b>											
Examiner Initials	Exh No.	Document Number					Date	Name	Class	Subclass	Filing Date If Appropriate
BP		60	0	1	9	7	1	Allaway et al.			06/14/96
		0	8	6	7	3	6	Allaway et al.			06/25/96
		0	8	6	6	5	0	Allaway et al.			06/14/96
		60	0	1	9	9	4	Allaway et al.			06/14/96
		0	8	8	7	4	5	Allaway et al.			06/13/97
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>											
BP		De Rossi, A., M. Pasti, F. Mummano, M. Panozzo, M. Dettin, C. Di Bello and L. Chieco-Bianchi. 1995. Synthetic peptides from the principle neutralizing domain of human immunodeficiency virus type I (HIV-1) enhance HIV-1 infection through a CD4-dependent mechanism. <i>Virology</i> 184: 187-196;									
		Co, M.S., M. Deschamps, R.J. Whitley and C. Queen. 1991. Humanized antibodies for antiviral therapy. <i>Proc. Natl. Acad. Sci. U.S.A.</i> 88: 2869-2873;									
		Trkola, A., T.J. Ketas, K.A. Nagashima, L. Zhao, T. Cilliers, L. Morris, J.P. Moore, P.J. Madden and W.C. Olson. 2001. Potent, broad-spectrum inhibition of human immunodeficiency virus type I by the CCR5 monoclonal antibody PRO 140. <i>J. Virol.</i> 75: 579-588;									
		Olson, W.C., G.E. Rabut, K.A. Nagashima, D.N. Tran, D.J. Anselma, S.P. Monard, J.P. Segal, D.A. Thompson, F. Kajumo, Y. Guo, J.P. Moore, P.J. Madden and T. Dragic. 1999. Differential inhibition of human immunodeficiency virus type 1 fusion, gp120 binding, and CC-chemokine activity by monoclonal antibodies to CCR5. <i>J. Virol.</i> 73: 4145-4155;									
		Parren, P.W., P.A. Marx, A.J. Hessell, A. Luckay, J. Harouse, C. Cheng-Mayer, J.P. Moore and D.R. Burton. 2001. Antibody protects macaques against vaginal challenge with a pathogenic R5 simian/human immunodeficiency virus at serum levels giving complete neutralization <i>in vitro</i> . <i>J. Virol.</i> 75: 8340-8347;									
		Lehner, T., C. Doyle, Y. Wang, K. Babaahmady, T. Whittall, L. Tao, L. Bergmeier and C. Kelly. 2001. Immunogenicity of the extracellular domains of C-C chemokine receptor 5 and the <i>in vitro</i> effects on simian immunodeficiency virus or HIV infectivity. <i>J. Immunol.</i> 166: 7446-7455;									
		Wu, L., W.A. Paxton, N. Kassam, N. Ruffing, J.B. Rottman, N. Sullivan, H. Choe, J. Sodroski, W. Newman, R.A. Koup and C.R. Mackay. 1997. CCR5 levels and expression pattern correlate with infectability by macrophage-tropic HIV-1, <i>in vitro</i> . <i>J. Exp. Med.</i> 185: 1681-1691; and									
↓		Chen Z., P. Zhou, D.D. Ho, N.R. Landau and P.A. Marx. 1997. Genetically divergent strains of simian immunodeficiency virus use CCR5 as a coreceptor for entry. <i>J. Virol.</i> 71: 2705-2714.									
<b>EXAMINER</b> /Bo Peng/					<b>DATE CONSIDERED</b> 07/20/2006						
<p>*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>											

Form PTO-1449		U.S. Department of Commerce Patent and Trademark Office						Atty. Docket No. 57906-E JPW/AJD/BWSL	Serial No. 10/763,545		
		INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)						Applicant(s) W. C. Olson and P. J. Maddon			
								Filing Date January 23, 2004	Art Unit		
<b>U.S. PATENT DOCUMENTS</b>											
Examiner Initials	Exh No.	Document Number					Date	Name	Class	Subclass	Filing Date If Appropriate
BP		0	8	7	4	6	1	8			06/13/97
		Pending claims in 09/724,105						Allaway et al.			11/28/00
		Pending claims in 09/852,238						Allaway et al.			05/09/01
		0	9	2	1	2	7	9	3		12/16/98
		60	1	1	2	5	3	2			12/16/98
		0	9	4	6	4	9	0	2		12/16/99
		0	9	6	6	3	2	1	9		09/15/00
		60	2	6	6	7	3	8			02/06/01
		2002/0146415						Olson et al.			
		60	2	8	2	3	8	0			04/06/01
		2002/0106374						Olson et al.			
		10	0	8	1	1	2	8			02/22/02
		60	3	5	8	8	8	6			02/22/02
		2003/0044411						Olson et al.			
		2003/0092632						Dragic et al.			
		2003/0228306						Olson et al.			
		10	7	6	3	5	4	5			01/23/04
		Pending claims in 09/460,216						Allaway et al.			12/13/99
BP	1	5	9	9	4	5	1	5	11/30/99	Hoxic	
BP	2	6	7	5	9	5	1	9	07/06/04	Li et al.	
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>											
BP		Rudikoff, S. Giusti, A. M., Cook, W. D., Scharff M. D., 1982. Single amino acid substitution altering antigen-binding specificity. Proc. Natl. Acad. Sci. 79: 1979-1983									
<b>EXAMINER</b> <i>/Bo Peng/</i>					<b>DATE CONSIDERED</b>					07/20/2006	
*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.											